

Notice of Allowability**Application No.**

10/674,848

Applicant(s)

KIM ET AL.

Examiner

YASIN M. BARQADLE

Art Unit

2456

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/26/2009.
2. ☒ The allowed claim(s) is/are 21,25-30 and 34-39.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 04/08/2009.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

Examiner's Amendment

1. An examiner's amendment to the record is attached. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Mincheol Kim (Reg. 51,306) on April 08, 2009.

3. In the claims:

- Please amend the claims as attached.

1-20 (Previously cancelled)

21. (Currently amended) A method of receiving a desired content by a user terminal, the method comprising:

connecting, by a user terminal, to a content providing server via a DSL network connected to the Internet, wherein the DSL network comprises a local DSL device, which links between the Internet and the user terminal;

requesting, by the user terminal, a desired content from the content providing server;

in reply to requesting, receiving, by the user terminal, a command from the content providing server for directing the user terminal to a multicast box that is configured to relay data for the desired content from

the content providing server to the user terminal, wherein the multicast box is not for providing the user terminal with an Internet connection;

subsequent to receiving the command, communicating, by the user terminal, with the multicast box according to the command from the content providing server;

receiving, by the user terminal, a command from the multicast box to communicate with the local DSL device to obtain information for use in determining whether the local DSL device supports multicasting;

in reply to the command from the multicast box, communicating with the local DSL device, by the user terminal, to receive a response from the local DSL device for use in determining whether the local DSL device supports multicasting; and

receiving, by the user terminal, the data from the multicast box;

if the local DSL device supports multicasting, transmitting the data received from the multicast box to a multicasting address of the local DSL device to enable the local DSL device to multicast the data to other user terminals connected to the local DSL device.

22. (Previously cancelled)

23. (Previously cancelled)

23. (Currently cancelled)

24. (Currently cancelled)

25. (Currently amended) A method of receiving a desired content by a user terminal, the method comprising:

connecting, by a user terminal, to a content providing server via a DSL network connected to the Internet, wherein the DSL network comprises a local DSL device, which links between the Internet and the user terminal;

requesting, by the user terminal, a desired content from the content providing server;

in reply to requesting, receiving, by the user terminal, a command from the content providing server for directing the user terminal to a multicast box that is configured to relay data for the desired content from the content providing server to the user terminal, wherein the multicast box is not for providing the user terminal with an Internet connection; and

subsequent to receiving the command, communicating, by the user terminal, with the multicast box to determine whether the local DSL device supports multicasting,

wherein if the local DSL device supports multicasting, the user terminal receives the data from the local DSL device, wherein if the local DSL device does not support multicasting, the user terminal receives the data from the multicast box via one-on-one connection.

26. (Previously presented) The method of Claim 21, wherein the user terminal downloads a computer program configured to enable the user terminal to communicate with the content providing server and the multicast box so as to receive the data from the multicast box.

27. (Previously presented) The method of Claim 0, wherein downloading occurs when the user terminal requests the desired content.

28. (Previously presented) The method of Claim 0, wherein upon requesting the content providing server determines whether there is a multicast box available to service the user terminal and transmit data for the desired content if determined that the multicast box is available to service the user terminal.

29. (Currently amended) A method of receiving a desired content by a user terminal, the method comprising:

connecting, by a user terminal, to a content providing server via a DSL network connected to the Internet, wherein the DSL network comprises a local DSL device, which links between the Internet and the user terminal;

requesting, by the user terminal, a desired content to the content providing server;

in reply to requesting, receiving, by the user terminal, a command from the content providing server for directing the user terminal to a multicast box that is configured to relay data for the desired content from the content providing server to the user terminal, wherein the multicast box is not for providing the user terminal with an Internet connection;

subsequent to receiving the command, communicating, by the user terminal, with the multicast box according to the command from the content providing server;

in response to communicating, determining, by the user terminal, whether the data is available for multicasting at the local DSL device; and

wherein if the data is available for multicasting at the local DSL device, the user terminal receives the data from the local DSL device, wherein if the data is not available form multicasting at the local DSL device, the user terminal receives the data from the multicast box via one-on-one connection.

30. (Previously presented) The method of Claim 0, further comprising:

receiving, by the user terminal, a command from the multicast box to communicate with the local DSL device so as to obtain information for use in determining whether the local DSL device supports multicasting;

in reply to the command from the multicast box, communicating with the local DSL device, by the user terminal, to receive a response from the local DSL device for use in determining whether the local DSL device supports multicasting.

31. (Currently cancelled)

32. (Currently cancelled)

33. (Previously cancelled)

34. (Previously presented) The method of Claim 0, wherein the user terminal downloads from the content providing server a computer program configured to enable the user terminal to communicate with the content providing server and the multicast box so as to receive the data from the multicast box.

35. (Currently amended) A method of relaying data from a content providing server to a terminal connected to a DSL network, the method comprising:

providing a multicast box configured to relay data from a content providing server to user terminals, wherein the multicast box is not for providing the user terminals with an Internet connection;

receiving, by the multicast box, data for a content from a content providing server, wherein the data is for a content selected by a first user terminal via a local DSL device linking between the Internet and the first user terminal;

subsequent to receiving the data, communicating, by the multicast box, with the first user terminal to determine whether a local DSL device

supports multicasting; and transmitting, by the multicast box, the data to the first user terminal,

wherein if the local DSL device supports multicasting, the data is transmitted via a multicasting address of the local DSL device,

wherein if the local DSL device does not support multicasting, the data is transmitted via one-on-one connection.

36. (Currently amended) The method of Claim 35 Q, wherein if the local DSL device supports multicasting, wherein the data is further transmitted from the first user terminal to a multicasting address of the local DSL device.

37. (Currently amended) The method of Claim 36 Q, wherein the data is available at the multicasting address for a second user terminal connected to the Internet via the local DSL device.

38. (Currently amended) The method of Claim 35 Q, wherein communicating with the first user terminal comprises sending to the first user terminal a command to determine whether the local DSL device supports multicasting.

39. (Currently amended) A method of relaying data from a content providing server to a terminal connected to a DSL network, the method comprising:

providing a multicast box configured to relay data from a content providing server to user terminals, wherein the multicast box is not for providing the user terminals with an Internet connection;

receiving, by the multicast box, data for a content from a content providing server, wherein the data is for a content selected by a first user terminal via a local DSL device linking between the Internet and the first user terminal;

subsequent to receiving the data, communicating, by the multicast box, with the first user terminal to verify whether the local DSL device supports multicasting;

receiving, by the multicast box, information indicative of whether the local DSL device supports multicasting;

transmitting, by the multicast box, the data to the first user terminal;

communicating, by the multicast box, with a second user terminal when the second user terminal is directed to a multicasting address of the multicast box upon the second user terminal's requesting of the content to the content providing server; and

directing, by the multicast box, the second user terminal to the local DSL device if the local DSL device supports multicasting and further if the data is available for multicasting at a multicasting address of the local DSL device.

40. (Currently cancelled)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Barqadle whose telephone number is 571-272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-

3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yasin M Barqadle/
Primary Examiner, Art Unit 2456